

**Determination of NEPA Adequacy (DNA)**  
**U.S. Department of Interior**  
**Bureau of Land Management**

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**OFFICE:** Phoenix District Office (PDO)

**NEPA/TRACKING NUMBER:** DOI-BLM-AZ-P0000-2012-003-DNA

**CASEFILE/PROJECT NUMBER:** AZA - 32639

**PROPOSED ACTION TITLE/TYPE:** Palo Verde Hub to Sun Valley Substation 500 kV Transmission Line – Grant Amendment - DNA

**LOCATION/LEGAL DESCRIPTION:** See Attached Map and Legal Description – This is an approximately 43-mile long, 500 kV transmission lines and ancillary facilities from the existing Palo Verde Hub Substation (T. 1 S., R. 6 W., Sec. 4; running northwest to the proposed Delaney Switchyard T. 2 N., R. 8 W., Sec. 25 (approximately 2.5 miles south of I-10 near Thomas Road west of 451st Avenue); and continuing north then west across I-10 to the proposed Sun Valley Substation at T. 4 N., R. 4 W., Section 29.

**APPLICANT (if any):** Arizona Public Service

**A. Description of the Proposed Action and any applicable mitigation measures**

The proposed action is to amend the ROW Grant dated 1/11/2006 based on final engineering drawings which refines the actual transmission line alignment and removed the extra areas that were identified in the original grant. Following the issuance of the 1/21/2006 ROW Grant, this 500 kV transmission line was not built because of a change in APS priorities and lack of final engineering. APS priorities have again changed and this line is scheduled for construction initiation in the fall of 2012 with completion and an in-service date by 2014. This amendment will refine the 200' wide ROW based on final engineering drawings. The placement of which is within the EA study area. The same mitigation measures as outlined in the 2006 ROW grant will be applied to this amended Grant. See attached Exhibit A for a map.

**B. Land Use Plan Conformance**

Land Use Plan (LUP) Name: Bradshaw-Harquahala Record of Decision and Approved Resource Management Plan, April 2010; LR-2-Utility corridors are designated to meet future expected demands for energy and water transmission facilities...Facilities significant enough to be basis for corridor designation are the following:...electric transmission facilities accommodating 115 kV lines or greater voltage..." This project is within the CAP and Palo Verde-Devers ROWs; page 30.

Lower Gila South Resource Management Plan (BLM, 1988) which defines land uses along the Palo Verde to Devers Utility Corridor.

Date Approved/Amended: **4/1/2010**

☒ The proposed action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decision(s):

☐ The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decision(s) (objectives, terms, and conditions):

**C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.**

Environmental Assessment Palo Verde Hub to TS-5 Substation 500kV Transmission Project, April 2005, Prepared by EPG.  
Finding of No Significant Impact, for EA AZ-020-2004-0056, Signed 10/26/2005 by Terri Raml.

A Cultural Resource Survey for the Proposed Arizona Public Service Palo Verde Hub to TS-5 Transmission Project, Maricopa County, Arizona; EPG Cultural Resource Services Technical Paper Number 2004-1421.

Special Status Species Information for Proposed Palo Verde to TS-5 Transmission Line Project, response letter dated February 26, 2004, Arizona Game and Fish Department.

**D. NEPA Adequacy Criteria**

- 1. Is the proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the exiting NEPA document(s)? If there are differences, can you explain why they are not substantial?**

Yes, the proposed action is "essentially similar to" an alternative analyzed in the EA. The final engineering drawings were recently received. The placement of the actual transmission structures differs from the original ROW grant coordinates, but all structures are still within the areas surveyed for the project and within the analysis area.

- 2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values?**

Yes, the range of alternatives analyzed in the existing NEPA document is appropriate with respect to the new proposed action. The proposed action is to amend the ROW

grant to refine the actual transmission line alignment and remove the extra areas that were identified in the original ROW grant dated January 11, 2006.

- 3. Is the existing analysis valid in light of new information or circumstances (such as, rangeland health standard assessment, recent endangered species listings, and updated lists of BLM-sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?**

The existing analysis is valid in light of the new engineering drawings and alignment. It can be concluded that the new alignment would not substantially change the proposed action. There are no new environmental circumstances since the 2005 EA.

A Finding of No Significant Impact (FONSI) was signed on 10/26/2005 by Teri Raml. The Decision Record (DR) was also signed on 10/26/2005 and it decided that APS should be granted a 200' wide, approximately 44 miles in length ROW to design, construct, operate, maintain and own a 500 kV electric transmission line. (Attachment B).

- 4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?**

Yes, the direct, indirect, and cumulative effects that would result from construction of the 500 kV transmission line are similar to those analyzed in the existing NEPA document. The area analyzed was substantially larger than the actual area needed to allow for the actual placement of the transmission towers based on topography and actual conditions on the ground.

- 5. Are the public involvement and interagency review associated with existing NEPA documents(s) adequate for the current proposed action?**

Yes, the public involvement and interagency review associated with existing NEPA document is adequate for the current proposed action. The proposed action is within the original NEPA analysis area. A jurisdictional meetings was held in mid-March 2004 for potentially impacted agencies; One public open house in Tonopah conducted on March 30, 2004; and informational letter mailed to over 300 individuals in March 2004; a BLM newsletter distributed to approximately 7,600 people (included APS customers and private landowners in study area; BLM also has a website and telephone information line. APS also briefed local news sources and placed paid advertisements for the March open house.

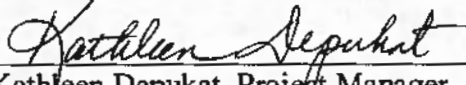
### **E. Persons/Agencies/BLM Staff Consulted**

| <b><u>Name</u></b>           | <b><u>Title</u></b> | <b><u>Resource/Agency Represented</u></b>  |
|------------------------------|---------------------|--|
| Federal Agencies:            |                     | U.S. Fish and Wildlife Service<br>U.S. Bureau of Reclamation<br>U.S. Department of Defense – Luke Air Force Base<br>Western Area Power Administration  |
| Native American Tribes       |                     | Ak-Chin Indian Community<br>Fort McDowell Yavapai Nation<br>Fort Mojave Tribe<br>Gila River Indian Community<br>Hopi Tribe<br>Salt-River Pima-Maricopa Community<br>Yavapai-Apache Nation<br>Yavapai-Prescott Indian Tribe   |
| State Agencies:              |                     | Arizona Department of Environmental Quality<br>AZ DOT<br>AGFD<br>AZ State Historic Preservation Office<br>Arizona State Land Dept.<br>AZ State Museum<br>Central AZ Water Conservation District  |
| County and City Governments: |                     | Maricopa County (MC) Association of Governments<br>MC Board of Supervisors (Andrew Kunasek, Max Wilson, & Mary Rose Wilcox)<br>MC DOT<br>MC Flood Control District<br>MC Parks & Recreation Dept.<br>MC Planning Department<br>MC Trails Development Committee<br>Tonopah Community Council<br>Tonopah Valley Association<br>Town of Buckeye |


Note: Refer to the EA/EIS for a complete list of the team members participating in the preparation of the original environmental analysis or planning documents

**CONCLUSION:**

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitute BLM's compliance with the requirements of NEPA.

  
Kathleen Depukat, Project Manager

  
Leah Baker, P&EC

  
Angelita S. Bullets, Phoenix District Manager

7/18/2012  
Date

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.



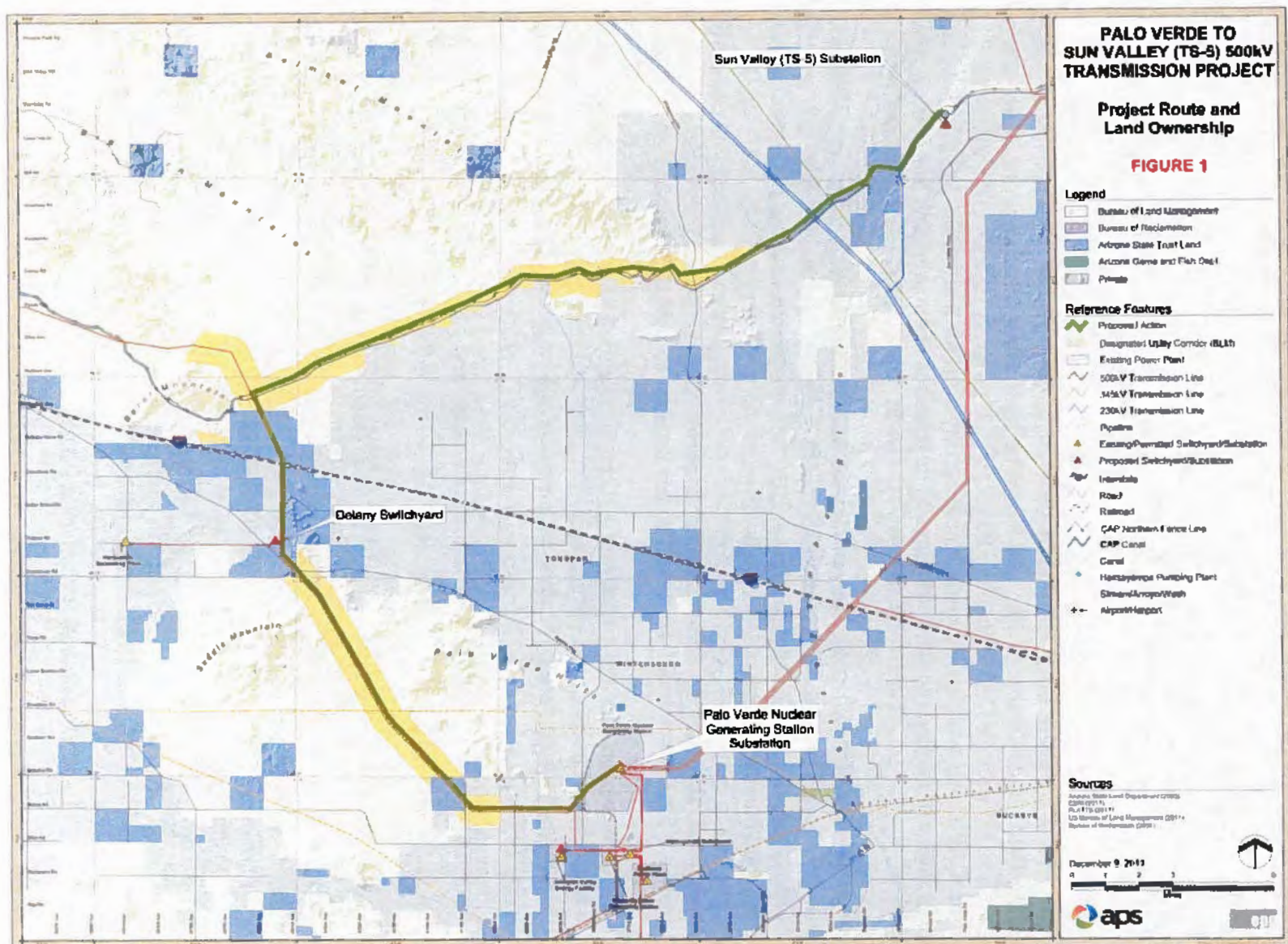


Figure 1-1. Project Overview Map

Attachment A

## FINDING OF NO SIGNIFICANT IMPACT

**Name of Environmental Assessment:** Palo Verde Hub to TS-5 Substation  
**Environmental Assessment No.:** AZ-020-2004-0056  
**Case File No:** AZA-32639  
**Bureau of Land Management Office:** Phoenix District Office, Arizona

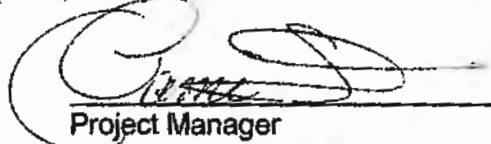
**Finding of No Significant Impact:** Upon review of the Environmental Assessment (EA) prepared for the above-named project and incorporated herein by reference, no significant long-term impacts on the human (socioeconomic) or natural environment would result. Short-term, temporary impacts on soils, water resources, biological resources, cultural resources, air quality, noise, and land use associated with construction activities of the proposed transmission line were identified which could be reduced by mitigation, and therefore are not considered significant. Long-term impacts on scenic quality were considered low to moderate, while the potential for long-term residual collision hazard for birds was considered low.

**Recommendation:** Grant a right-of-way to Arizona Public Service Company (APS) for construction, operation, and maintenance of a 500 kilovolt (kV) transmission line. The transmission line would originate from the Palo Verde Hub, at either an open transmission interconnection position in the southern switchyard at the Palo Verde Nuclear Generation Station (PVNGS) or a new 500 kV switchyard to be constructed at the Arlington Valley Energy Facility Power Plant (Arlington Power Plant). The transmission line would connect into the TS-5 Substation generally located south of the Hassayampa Pumping Plant along the Central Arizona Project (CAP) Canal, west of 291<sup>st</sup> Avenue and north of the Beardsley Road alignment. The proposed right-of-way would be 200 feet wide, approximately 42 to 44 miles in length, of which approximately 26 miles would be located on Bureau of Land Management (BLM) administered lands. APS would implement the recommended Standard Operating Procedures and Mitigation Measures listed in Attachment A. The transmission line would be owned by APS and operated by APS and other project proponents.

**Stipulations:** APS is to implement the recommended Standard Operating Procedures and Mitigation Measures listed in Attachment A. Compliance with stipulations and mitigation measures will be monitored during project implementation. BLM issuance of the right-of-way grant is conditional upon APS obtaining all other federal, state, and local permits required to construct and operate the transmission line. APS has obtained the required Certificate of Environmental Compatibility from the Arizona Corporation Commission. The Phoenix District Office has fulfilled requirements in accordance with the Section 106 process regarding cultural resource issues, and requirements regarding biological resource issues.

**Rationale:** The EA for the Proposed Action has been prepared in accordance with National Environmental Policy Act (NEPA) requirements, including the public involvement procedures prescribed by 40 CFR §1506.6. The project design and mitigation measures proposed in the EA are integral to the Proposed Action, and would reduce short-term and long-term environmental impacts to a level of insignificance. Issuance of right-of-way grant AZA-32639 to APS for the construction, operation, and maintenance of an electric transmission line is consistent with the Lower Gila South Resource Management Plan (BLM, 1988) which defines land uses along the Palo Verde to Devers Utility Corridor, and the Lower Gila North Management Framework Plan (BLM, 1994) which defines the CAP Utility Corridor.

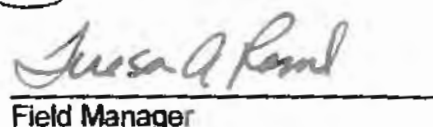
Recommendation of Finding:

  
 Project Manager

10/25/05  
 Date

I concur:

Approval of Finding:

  
 Field Manager

10/26/05  
 Date

## DECISION RECORD

Serial No.: AZA-32639  
EA No.: AZ-020-2004-0056

### Decision:

It is decided that Arizona Public Service Company (APS) be granted a right-of-way by the Bureau of Land Management (BLM) 200 feet wide, approximately 44 miles in length, approximately 630 acres, including the rights to design, construct, operate, maintain and own a 500 kilovolt (kV) electric transmission line.

The transmission line would originate at the Palo Verde Hub, at either an open transmission interconnection position in the southern switchyard at the Palo Verde Nuclear Generation Station (PVNGS) or a new 500kV switchyard to be constructed at the Arlington Valley Energy Facility Power Plant (Arlington Power Plant). The transmission line would connect into the TS-5 Substation, on private land, generally located south of the Hassayampa Pumping Plant along the Central Arizona Project (CAP) Canal, west of 291<sup>st</sup> Avenue and north of the Beardsley Road alignment, Maricopa County, Arizona.

### Rationale for Decision:

The Proposed Action is consistent with the current Lower Gila South Resource Management Plan (BLM, 1988) and the Lower Gila North Management Framework Plan (BLM, 1994) which promote utility development within approved corridors (Palo Verde to Devers and Central Arizona Project). Such corridors are dedicated to the use and construction of structural facilities such as the Palo Verde Hub to TS-5 500 kV transmission project.

The Proposed Action will provide needed electrical power to support the increased development and growth occurring and anticipated in the western Phoenix metropolitan area. The project will also strengthen the entire APS Phoenix metropolitan area transmission system providing an additional electrical transmission source to the valley.

Upon implementation of the attached standard operating procedures and mitigation measures, short-term and long-term environmental and human (socioeconomic) impacts identified in the Environmental Assessment would not be significant. Compliance monitoring would be conducted to ensure that these mitigation measures are properly implemented and that sensitive resources are protected.

### Standard Operating Procedures and Mitigation Measures:

See Attachment A.



Field Manager

10/26/05  
Date



## ATTACHMENT A

### Standard Operating Procedures and Mitigation Measures

#### Standard Operating Procedures

1. All construction vehicle movement outside of the right-of-way will be restricted to predesignated access, contractor acquired access, or public roads.
2. The limits of construction activities will typically be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits. The right-of-way boundary will be flagged in environmentally sensitive areas described in the specific plan of development to alert construction personnel that those areas should be avoided.
3. In construction areas where recontouring is not required, vegetation will be left in place wherever possible to avoid excessive root damage and allow for resprouting.
4. In construction areas (e.g., marshalling yards, structure sites, spur roads from existing access roads) where ground disturbance is significant or where recontouring is required, surface restoration will occur as required by the landowner or land-management agency. The method of restoration will typically consist of returning disturbed areas to their natural contour (to the extent practical), reseeding or revegetating with native plants (if required), installing cross drains for erosion control, placing water bars in the road, and filling ditches. Seed must be tested and certified to contain no noxious weeds in the mix by the State of Arizona Agricultural Department. Seed viability must also be tested at a certified laboratory approved by the authorized officer.
5. Watering facilities (e.g., tanks, developed springs, water lines, wells, etc.) will be repaired or replaced to their predisturbed conditions as required by the landowner or land-management agency if they are damaged or destroyed by construction activities.
6. Prior to construction, all construction personnel will be instructed on the protection of cultural, paleontological, and ecological resources. To assist in this effort, the construction contract will address (a) federal and state laws regarding antiquities, fossils, and plants and wildlife, including collection and removal; and (b) the importance of these resources and the purpose and necessity of protecting them.
7. Impact avoidance and mitigation measures for cultural resources developed in consultation with BLM and the ASLD will be implemented.
8. The project sponsors will respond to complaints of line-generated radio or television interference by investigating the complaints and implementing appropriate mitigation measures. The transmission line will be patrolled on a regular basis so that damaged insulators or other line materials that could cause interference are repaired or replaced.
9. The project sponsors will apply necessary mitigation to minimize problems of induced currents and voltages onto conductive objects sharing a right-of-way, to the mutual satisfaction of the parties involved.
10. All construction and maintenance activities shall be conducted in a manner that will minimize disturbance to vegetation, drainage channels, and intermittent and perennial streambanks. In addition, all existing roads will be left in a condition equal to or better than their condition prior to the construction of the transmission line.

11. All requirements of those entities having jurisdiction over air quality matters will be adhered to and any necessary permits for construction activities will be obtained. Open burning of construction debris (cleared trees, etc.) will not be allowed on BLM administered lands.
12. Fences and gates, if damaged or destroyed by construction activities, will be repaired or replaced to their original predisturbed condition as required by the landowner or the land-management agency. Temporary gates will be installed only with the permission of the landowner or the land-management agency, and will be restored to their original predisturbed condition following construction.
13. The proposed hardware and conductor will limit the audible noise, radio interference (RI), and television interference (TVI) due to corona. Tension will be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution will be exercised during construction to avoid scratching or nicking the conductor surface, which may provide points for corona to occur.
14. During operation of the transmission line, the right-of-way will be maintained free of construction related non-biodegradable debris.
15. Totally enclosed containment will be provided for all debris. All construction waste including debris, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials will be removed to a disposal facility authorized to accept such materials.
16. Structures will be constructed to conform to "Suggested Practices for Raptor Protection on Power Lines" (Avian Power Line Interaction Committee 1996).
17. Species protected by the Arizona Native Plant Law will be salvaged. A salvage plan approved by the BLM will be included in the specific plan of development. Generally, salvage may include:
  - removal and stockpiling for replanting on site
  - removal and transplanting out of surface disturbance area
  - removal and salvage by private individuals
  - removal and salvage by commercial dealers
  - any combination of the above
18. The alignment of any new access roads or overland routes will follow the designated area's landform contours where possible, providing that such alignment does not additionally impact resource values. This would minimize ground disturbance and reduce scarring.
19. All new access roads not required for maintenance will be permanently closed using the most effective and least environmentally damaging methods appropriate to that area with concurrence of the landowner or land manager (e.g., stock piling and replacing topsoil, or rock replacement). This would limit access into the area. Fencing, signing, and other closure methods will be determined by the BLM and paid for by the contractor or APS.
20. In designated areas, structures will be placed or rerouted so as to avoid sensitive features such as, but not limited to, riparian areas, watercourses, and cultural sites, or to allow conductors to clearly span the features, within limits of standard tower design.
21. Transmission line structures will comply with Federal Aviation Administration Guidelines to minimize aircraft hazards (Federal Aviation 77).
22. Special status species or other species of particular concern will continue to be considered during the construction phase of the Project, in accordance with management policies set forth by the BLM and other appropriate land management agencies. This will entail

monitoring for plant and wildlife species of concern along the proposed transmission line and associated facilities (i.e., access roads and staging areas). In cases where such species are identified, appropriate action will be taken to avoid adverse impacts on the species and its habitat.

23. The contractor or APS will submit to BLM a proposed road development plan for inclusion in the Plan of Development for the alignment between Burnt Mountain (Links 60/70) and Link 110. The goal of the plan is to limit new road construction to a minimum and discourage an east to west travel corridor.

#### Other Mitigating Measures

1. All applicable regulations in accordance with 43 CFR 2800.
2. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the Plan of Development (POD) and made part of the grant. Any relocation, additional construction, or use that is not in accord with the approved POD, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved POD, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.
3. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder or any person working on the holders behalf, on public or federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made the authorized officer to determine the appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of the evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.
4. Construction holes left open over night shall be covered. Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through and into a hole.
5. Within 30 days of completion, the holder will submit to the authorized officer, as-built drawings and a certification of construction verifying that the facility has been constructed (and tested) in accordance with the design, plans, specifications, and applicable laws and regulations.
6. During construction, the holder shall apply water for the purpose of dust control.
7. The holder shall trim trees in preference to cutting trees and shall cut trees in preference to bulldozing them as directed by the authorized officer.
8. Holder shall remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Topsoil will be conserved during excavation and reused as cover on disturbed areas to facilitate re-growth of vegetation.
9. The holder shall maintain the right-of-way in a safe usable condition, as directed by the authorized officer.

10. The holder will be responsible for the total reclamation of the right-of way shall it ever be relinquished or terminated. This reclamation will include the scarification of the road surface and the reseeding of the entire disturbed area with a native seed mixture that will be approved by the Authorized Officer prior to the reclamation work.
11. The holder of this right-of-way grant or the holder's successor in interest shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and the regulations of the Secretary of the Interior issued pursuant thereto.
12. All design, material, and construction, operation, maintenance, and termination practices shall be in accordance with safe and proven engineering practices.
13. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
14. The holder(s) shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
15. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901 et seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
16. Prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a pre-termination conference. This conference will be held to review the termination provisions of the grant.
17. Archeological sites that are eligible for National Register shall be spanned and avoided during construction and maintenance activities. If an eligible site cannot be spanned, impact avoidance and mitigation measures developed in consultation with the State Historic Preservation Office and other interested parties shall be implemented during post-Environmental Assessment phases of project implementation.
18. Prior to construction, a training program shall be instituted that would stress the importance of avoiding unintentional and intentional damage to cultural, paleontological, and ecological resources.



### Desert Tortoise Mitigation Measures

19. A desert tortoise protection education program shall be presented to all employees, inspectors, supervisors, contractors, and subcontractors who carry out proposed activities at the project site. The education program shall include discussions of the following:
  - legal and sensitive status of the tortoise
  - brief discussion of tortoise life history and ecology
  - mitigation measures designed to reduce adverse effects to tortoises
  - protocols to follow if a tortoise is encountered, including appropriate contact points
20. A desert tortoise monitor (qualified desert tortoise biologist) will be required when constructing within Category 1 tortoise habitat. The biologist shall watch for tortoises wandering into construction areas, check under vehicles, check at least three times per day any excavations that might trap tortoises, and conduct other activities necessary to ensure that death and injury of tortoises are minimized.
21. Protocols for dealing with any tortoises found in project areas shall be in accordance with Arizona Game and Fish Department's Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects, revised August 7, 1996.
22. Vehicle use shall be limited to existing or designated routes to the extent possible. Areas of new construction shall be flagged or marked on the ground prior to construction. All construction workers shall strictly limit their activities and vehicles to areas that have been marked. Construction personnel shall be trained to recognize markers and understand the equipment movement restrictions involved.
23. Construction sites shall be maintained in a sanitary condition at all times. The project proponent shall be responsible for controlling and limiting litter, trash, and garbage by placing refuse in predator-proof, sealable receptacles. Trash and debris shall be removed when construction is complete.
24. All features that can entrap tortoise (i.e., trenches, pits, and other features) in the project area shall be checked twice daily (morning and afternoon) for trapped desert tortoise.
25. During and after completion of the project, trenches, pits, and other features in which tortoises could be entrapped or entangled, shall be filled in, covered, or otherwise modified so they are no longer a hazard to desert tortoise.
26. All dogs in the project area shall be on a leash.

**GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES  
ENCOUNTERED ON DEVELOPMENT PROJECTS**  
Arizona Game and Fish Department  
Revised January 17, 1997

The Arizona Game and Fish Department (Department) has developed the following guidelines to reduce potential impacts to desert tortoises, and to promote the continued existence of tortoises throughout the state. These guidelines apply to short-term and/or small-scale projects, depending on the number of affected tortoises and specific type of project.

Desert tortoises of the Sonoran population are those occurring south and east of the Colorado River. Tortoises encountered in the open should be moved out of harm's way to adjacent appropriate habitat. If an occupied burrow is determined to be in jeopardy of destruction, the tortoise should be relocated to the nearest appropriate alternate burrow or other appropriate shelter, as determined by a qualified biologist. Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim. Tortoises should be moved quickly, kept in an upright position at all times and placed in the shade. Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises. Tortoises must not be moved if the ambient air temperature exceeds 105 degrees Fahrenheit unless an alternate burrow is available or the tortoise is in imminent danger.

A tortoise may be moved up to two miles, but no further than necessary from its original location. If a release site, or alternate burrow, is unavailable within this distance, and ambient air temperature exceeds 105 degrees Fahrenheit, the Department should be contacted to place the tortoise into a Department-regulated desert tortoise adoption program. Tortoises salvaged from projects which result in substantial permanent habitat loss (e.g. housing and highway projects), or those requiring removal during long-term (longer than one week) construction projects, will also be placed in desert tortoise adoption programs. Managers of projects likely to affect desert tortoises should obtain a scientific collecting permit from the Department to facilitate temporary possession of tortoises. Likewise, if large numbers of tortoises (>5) are expected to be displaced by a project, the project manager should contact the Department for guidance and/or assistance.

Please keep in mind the following points:

- These guidelines do not apply to the Mohave population of desert tortoises (north and west of the Colorado River). Mohave desert tortoises are specifically protected under the Endangered Species Act, as administered by the U.S. Fish and Wildlife Service.
- These guidelines are subject to revision at the discretion of the Department. We recommend that the Department be contacted during the planning stages of any project that may affect desert tortoises.
- Take, possession, or harassment of wild desert tortoises is prohibited by state law. Unless specifically authorized by the Department, or as noted above, project personnel should avoid disturbing any tortoise.